

B10  
Cen

apical side. The cell line derived from brain capillary endothelial cells expresses a temperature sensitive SV40 large T-antigen, GLUT-1 transporter, p-glycoprotein, alkaline phosphatase, and  $\gamma$ -glutamyltransferase. A method of establishing immortalized cells by subculturing cells obtained from retinal capillary endothelial cells, choroid plexus epithelial cells, or brain capillary endothelial cells of the above-described transgenic animal are disclosed. These cells are useful in screening drugs regarding safety and efficacy thereof, and developing method for diagnosing and treating diseases relating to nutrition metabolism in retinal tissues and brain on cellular level studies.

Amendments to the specification and Abstract are indicated in the attached "Marked Up Version of Amendments" (pages i - vi).

In the Claims

Please amend Claims 1, 3, 5-7, 9-11 and 13-14 as follows. Amendments to the claims are indicated in the attached "Marked Up Version of Amendments" (pages vii - ix).

- B11  
SUB  
PC
1. (Amended) A conditionally immortalized cell established from a transgenic animal into which a large T-antigen gene of SV40 temperature sensitive mutant tsA58 has been introduced, and wherein the cell exhibits an inside-outside polarity when cultured in vitro, and is capable of taking up a drug.

- B12  
SUB  
C2
3. (Amended) An established cell derived from retinal capillary endothelial cells, which expresses a temperature sensitive SV40 large T-antigen gene, GLUT-1 transporter, and p-glycoprotein, and wherein the cell exhibits an inside-outside polarity when cultured in vitro, and is capable of taking up a drug.

- SUB  
C3
5. (Amended) A method of establishing a conditionally immortalized cell which expresses a temperature sensitive SV40 large T-antigen gene, GLUT-1 transporter, and p-glycoprotein, the method comprising treating retinal capillary vessels of a transgenic animal into which a large T-antigen gene of SV40 temperature sensitive mutant tsA58 has been introduced with protease and subculturing the resulting cells.
- B13
6. (Amended) An established cell which expresses a temperature sensitive SV40 large T-antigen gene, GLUT-1 transporter, and p-glycoprotein, and wherein the cell exhibits an inside-outside polarity when cultured in vitro, and is capable of taking up a drug, the cell obtained by treating retinal capillary vessels of a transgenic animal into which a large T-antigen gene of SV40 temperature sensitive mutant tsA58 has been introduced with protease and subculturing the resulting cells.
7. (Amended) An established cell derived from choroid plexus epithelial cells, wherein the cell exhibits an inside-outside polarity when cultured in vitro, and is capable of taking up a drug, which expresses a temperature sensitive SV40 large T-antigen gene, shows localization of  $\text{Na}^+\text{-K}^+$  ATPase and GLUT-1 transporter in the cell membrane, and when cultured in a monolayer, shows the localization of  $\text{Na}^+\text{-K}^+$  ATPase in the apical side.
- SUB  
C4  
C15  
B14
9. (Amended) A method of establishing a conditionally immortalized cell which expresses a temperature sensitive SV40 large T-antigen gene, shows localization of  $\text{Na}^+\text{-K}^+$  ATPase and GLUT-1 transporter in the cell membrane, and when cultured in a monolayer, shows the localization of  $\text{Na}^+\text{-K}^+$  ATPase in the apical side, the method comprising treating choroidal epithelium tissues of a transgenic

animal into which a large T-antigen gene of SV40 temperature sensitive mutant tsA58 has been introduced with protease and subculturing the resulting cells.

- B14  
concept
10. (Amended) An established cell which expresses a temperature sensitive SV40 large T-antigen gene, wherein the cell exhibits an inside-outside polarity when cultured in vitro, and is capable of taking up a drug, and shows localization of  $\text{Na}^+\text{-K}^+$  ATPase and GLUT-1 transporter in the cell membrane, and when cultured in a monolayer, shows the localization of  $\text{Na}^+\text{-K}^+$  ATPase in the apical side, which is obtained by treating choroidal epithelium tissues of a transgenic animal into which a large T-antigen gene of SV40 temperature sensitive mutant tsA58 has been introduced with protease and subculturing the resulting cells.

- SUB  
C415  
C416
11. (Amended) An established cell derived from brain capillary endothelial cells, wherein the cell exhibits an inside-outside polarity when cultured in vitro, and is capable of taking up a drug, which expresses a temperature sensitive SV40 large T-antigen, GLUT-1 transporter, p-glycoprotein, alkaline phosphatase, and  $\gamma$ -glutamyltransferase.

- B15
13. (Amended) A method of establishing a conditionally immortalized cell which expresses a temperature sensitive SV40 large T-antigen gene, GLUT-1 transporter, p-glycoprotein, alkaline phosphatase, and  $\gamma$ -glutamyltransferase, the method comprising treating brain capillary vessels of a transgenic animal into which a large T-antigen gene of SV40 temperature sensitive mutant tsA58 has been introduced with protease and subculturing the resulting cells.

- SUB  
C5
14. (Amended) An established cell which expresses a temperature sensitive SV40 large T-antigen gene, GLUT-1 transporter, p-glycoprotein, alkaline phosphatase